



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

646.4001

Job Sheet 170035



Part No: 646.4001

Job Qty: 1 ea

Part Name: AS350 Cable Cutter System



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/8/18

Job Tracking No:

Due Date: 2/9/18

Created By: Mario Poulin

Type: SOLD

Description:

Customer: Heli Austria GMBH (CHAUS03)

Heliport A-5600 Street, PG Johann, A-5600 Austria ph:43 6462 4200 fx:43 (0) 6462 4200 42.

Note: DWG REV C1 IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM IPP REV:B 15.01.08 AS PER DWG REV.B
DD VERF:JLM IPP REV:C 16.01.07 AS PER DWG REV.C DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Lead Time	Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier			
90	Start up Operation	1 Ea	2/9/18	2/9/18	0.00	0.00	Start Up Stores/Pkg-1			JAN 26 2018
110	Packaging	1 pcs	2/9/18	2/9/18	0.00	0.00	Packaging1-1			JAN 26 2018
120	QC	1 pcs	2/9/18	2/9/18	0.00	0.00	QC4			Smb
125	DC	1 pcs	2/9/18	2/9/18	0.00	0.00	DC			
130	Packaging	1 pcs	2/9/18	2/9/18	0.00	0.00	Packaging3-1			Smb
140	QC21-FG	1 Ea	2/9/18	2/9/18	0.00	0.00	QC21			Smb

Part Op 125 - Photocopy bluefile & type labels per PPP 646.4001

Descriptions: 130 - Identify and pack for shipping as per PPP 646.4001 Location: _____

JAN 29 2018 10)

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation eop col18 eop 03/18 526885	600.0129 5031122	8	336	0	0
	600.0990 5031141	1	25	0	0
	600.0991 5031138	1	27	0	0
	600.1012 5031120	1	55	0	0
	600.1013 5031118	5	105	0	0
	646.2910 5031115	1	12	0	0
	646.3001 5031111	1	4	0	0
	646.3110 5031108	1	7	0	0
	646.3210 5031106	1	11	0	0
	646.3301 5030922	1	5	0	0
	646.3510 5030921	1	9	0	0
	646.3511 5030917	1	7	0	0
	646.3610 5030912	1	22	0	0
	646.3710 5030907	1	29	0	0
	646.3711 5030902	1	17	0	0
	646.3712 5030901	1	31	0	0
	646.3713 5030900	1	27	0	0
	646.3714 5030899	1	29	0	0
	646.3715 5030897	2	44	0	0
	646.3716 5030894	1	24	0	0
	646.3717 5030893	1	29	0	0
	646.3718	2	40	0	0
	646.3719 5030891	2	18	0	0

QA Closed:

Date:

Work Order update only

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____		Rework ☐	Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐			
NCR No. _____		Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐			
Date: _____		Use-as-is ☐	Thermoforming ☐	/Store/Packaging Supplier ☐		Other ☐			
Description: _____		Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL.: 1 613 632-5200 Email: sales@dartaero.com www.dartaerospace.com				MRB (QSI042) Approval			
DART AEROSPACE S035843  AS350 Cable Cutter System PART NO: 646.4001 Original Serial #: S035843 Revision: Operation: Change No:		Start up Operation 01/26/18 Job No: 170035				Completed By			
						Lead hand / Supervisor Approval Verification			
						QC / QA Coordinator Approval			
Root Cause Environment ☐ No Re-verf ☐ Design ☐ Operator ☐ Doc/Data ☐ Offset/Setu ☐ Equip/Tooling ☐ Supplier ☐ Handling/Pre ☐ Training ☐ Material ☐ Use for Testing ☐ Internal Transport ☐ Poor Information ☐ Tribal Knowledge ☐ Rushing ☐ LOA ☐ Product Improvement ☐ Substation ☐ Process Improvement ☐ Past Expiry Date ☐ Manufacturing Process ☐ Misidentified ☐ Past Due ☐		Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		/Surge ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER: _____									

646.3810	5030889	2	17	0	0
646.3811	5030884	1	14	0	0
646.3812	5032796	2	13	0	0
646.3813	5030883	1/157545	12	0	0
646.3910	5030882	4	40	0	0
646.3911	5030880	1	18	0	0
646.3912	5030878	4	42	0	0
5030877	646.3913	1	32	0	0
5030875	646.9410	1	36	0	0
110 5030881	647.0112	2	141	0	0
	647.7703	2	18	0	0
	650.9201	2	21	0	0
	AN3-11A	5030822	10	583	0
	AN3-12A	5030821	2	90	0
	AN3-13A	5030819	1	24	0
	AN3-3A	5030817	4	399	0
	AN3-4A	5030816	10	467	0
	AN3-5A	5030815	2	456	0
	AN3-6A	5030812	2	252	0
	AN316C4R	5030807	2	64	0
	AN44-5A	FM139238.80	2	33	0
	AN4C7A	5030804	2	163	0
	AN665-34R	5030803	2	78	0
	CCR264SS3-02	5030799	36	580	0
	CR3213-5-3	5030792	14	331	0
	MS20426AD5-7	5030789	2	1,291	0
	MS20470AD5-5.5	5030559	8	501	0
	MS20470AD5-6	5030556	8	375	0
	MS20470AD5-7	5030555	3	245	0
	MS21042L08	5030554	2	0	0
	MS21042L3	5030552	63	3,262	0
	MS21042L4	5030551	2	3,660	0
	MS21047-3	5030549	18	788	0
	MS24693-C278	5030545	5	130	0
	MS24694-S51	5030543	5	513	0
	MS24694-S54	5030540	2	228	0
	MS24694-S55	5030446	3	129	0
	MS27039-08-13	5030437	2	545	0
	MS27039-1-10	5030432	2	451	0
	MS27039-1-12	5030430	6	269	0
12 5030423	MS27039-1-16	FM139237-024	1/2	500	0
	MS27039-1-19	5030407	22	425	0
	MS27039-1-20	5030401	2	105	0
	MS27039-1-21	5030398	4	63	0
	NAS1149F0332P	5030376	144	5,707	0
	NAS1149F0363P	5030373	2	294	0
	NAS1149F0432P	5030372	4	1,345	0
	NAS1149FN832P	5030371	4	7,048	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

REFERENCE C.

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NOTES:

1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.

2 INSTALL F/N 14 WITH F/N 52 & 53.

3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651.

4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES P/N 021200-24216.

5 REUSE FASTENERS FROM F/N 1.

6 USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.

7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.

8 INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 17 SCREW.

9 NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

UNINCORPORATED ECN(S)

05304

5	5	5	78	601.3875	SCREW					
1	1	1	77	646.9410	SHIM					
		4	76	601.2764	WASHER					
		2	75	601.2973	LOCKNUT					
		2	74	601.2988	SCREW					
		2	73	601.2943	LOCKNUT					
		2	72	601.3128	NUT					
		2	71	601.3209	LOCKNUT					
		4	70	601.2638	WASHER					
		2	69	601.2669	BOLT					
		2	68	601.3119	CLEVIS					
		2	67	601.3121	EYE BOLT					
		2	66	650.9201	EYE BRACKET ASSY					
	REF	REF	65	647.5701	GPS MOUNT KIT					
			2	64	601.3151	WASHER				
		2	63	601.2911	SCREW					
		24	62	601.2637	SCREW					
	2	2	61	601.2763	BOLT					
		1	60	646.3913	SHIM					
		4	59	646.3912	SHIM					
		1	58	646.3911	SHIM					
		4	57	646.3910	SHIM					
		5	56	600.1013	PRIMER					
		8 FT	55	600.0129	VHB TAPE					
		1	1	54	600.1012	SEALANT				
		1	53	600.0991	MAGNOROND 4398 PART B					
		1	52	600.0990	MAGNOROND 4398 PART A					
	6	10	51	601.2826	BOLT					
			50	646.3814	WIPER BRACKET					
		2	49	601.2910	SCREW					
	2		2	48	601.1365	SCREW				
	2		2	47	646.3719	DOUBLER				
		2	2	46	646.3718	CUSTOM WASHER				
	1		1	45	646.3717	DOUBLER				
		22	2	44	601.1948	SCREW				
		2	2	43	601.1952	SCREW				
		4	4	42	601.1956	SCREW				
4006	4003	4004	4003	4002	4003	FIND #	PART #	DESCRIPTION	MATL	SPEC.

REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECN 0219, 0236, 0219 & 0215	02/06/2010	P. BRAVO
B	INCORPORATED ECN 0306, 0307 & 0471	11/04/2014	P. BRAVO
C	INCORPORATED ECN 0806	09/04/2015	P. BRAVO

		2	2	41	601.2829	SCREW		MS24694554
		2	2	40	601.2831	RIVET		MS20426AD5-7
		1	1	39	646.3716	GAUGE BRACKET		
		6	6	38	601.1953	SCREW		MS22039-1-17
	2	2	2	37	646.3715	STRUT DOUBLER		
		2	2	36	601.2824	BOLT		AN3-5A
12	36		36	35	601.2277	RIVET		OC924859-02
6	18		18	34	600.0795	NUTPLATE		MS21047-3
3	3		3	33	601.2565	RIVET		MS20470AD5-7
1	1		1	32	646.3813	STRUT BRACKET		
4	4		4	31	601.2822	BOLT		AN3-3A
2	2		2	30	646.3812	GUSSET BRACKET		
8	8		8	29	601.2564	RIVET		MS20470AD5-6
1	1		1	28	646.3714	GUSSET		
1	1		1	27	646.3610	FILLER		
3	3		3	26	601.2830	SCREW		MS24694555
2	2		2	25	601.2825	BOLT		AN3-6A
1	1		1	24	646.3811	RADIUS BLOCK		
1	1		1	23	646.3712	CLIP		
1	1		1	22	646.3711	CLIP		
8	8		8	21	601.2832	RIVET		MS20470AD5-5.5
14	14		14	20	601.2020	RIVET		CR3215-3
4	6	4	6	19	601.2823	BOLT		AN3-4A
1	1		1	18	601.2827	BOLT		AN3-3A
5	5		5	17	601.2912	SCREW		MS24694551
1	1		1	16	646.3713	GUSSET		
1	1		1	15	646.3210	SUPPORT		
1	1		1	14	646.3710	DOUBLER		
1	1		1	13	646.3110	CHANNEL		
14	10	8	53	6	601.1624	LOCKNUT		MS21048-3
16	32	18	120	16	601.1607	WASHER		MS11490032P
			1	10	646.3410	LH WIPER DEFLECTOR		
			1	9	646.3411	RH WIPER DEFLECTOR		
		2	2	8	647.7703	STRUT ASSY		
		2	2	7	647.0112	STRUT BRACKET		
1	1		1	6	646.3511	STRUT		
1	1		1	5	646.3510	STRUT		
2	2		2	4	646.3810	BRACKET		
	1		1	3	646.2910	DEFLECTOR		
1	1		1	2	646.3001	LOWER CUTTER ASSY		
	1		1	1	646.3301	UPPER CUTTER ASSY		
X					646.4006	LOWER CUTTER FIXED PROVISIONS		
	X				646.4005	LOWER CUTTER REMOVABLE PROVISIONS		
		X			646.4004	FIXED PROVISIONS KIT		
			X		646.4003	CABLE CUTTERS KIT WITHOUT FIXED PROVISIONS		
			X		646.4002	AS350 WIPER DEFLECTOR KIT		
			X		646.4001	AS350 CABLE CUTTERS KIT		

QTY		PARTS LIST	
NEXT ASSY (S)		ORIGINAL DATE	
		02/06/2010	
		DRAWN BY	
		S. HPP	
		P. BRAVO	
		DRAWING APPROVAL	
		P. BRAVO	
		09/04/2015	
		CHECKED BY	
		P. BRAVO	
		09/04/2015	
		UNLESS OTHERWISE SPECIFIED	
		DIMENSIONS ARE IN INCHES	
		ON BRANCHES ARE	
		2 PLACE DECIMALS .001	
		AND 3/16	
		SCALE NONE	
		SHEET 1 OF 5	

DART 3030 ENTERPRISE CT., SUITE A
VISTA, CA 92081
(602) 724-5300
APICAL INDUSTRIES, INC.
DBA DART AEROSPACE

AS350 CABLE CUTTERS KIT

REV. 8
CAGE CODE: 646.4000
SCALE: NONE
SHEET 1 OF 5